

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended): A rubber composition comprising a diene elastomer, a reinforcing inorganic filler, a coupling agent providing the bond between the inorganic filler and the elastomer, wherein said inorganic filler comprises a silicon carbide having the following features:

- (a) a BET specific surface area of between 20 and 200 m²/g;
- (b) an average particle size by mass, noted d_w, of between 10 and 350 nm;

[[and,]] wherein said silicon carbide constitutes more than 50% by volume of total reinforcing filler and the amount of silicon carbide is greater than 50 phr.

Claim 2 (Canceled).

Claim 3 (Canceled)

4. (Original): The composition according to Claim 1, wherein said reinforcing inorganic filler further comprises silica or alumina.

5. (Original): The composition according to Claim 1, further comprising carbon black.

6. (Original): The composition according to Claim 5, wherein the amount of carbon black is between 2 and 20 phr.

7. (Original): The composition according to Claim 1, wherein the BET surface area is between 20 and 150 m²/g.

8. (Original): The composition according to Claim 7, wherein the BET surface area lies within a range from 25 to 140 m²/g.

9. (Original): The composition according to Claim 1, herein the size d_w lies within a range from 20 to 300 nm.

10. (Original): The composition according to Claim 9, wherein the size d_w lies within a range from 20 to 250 nm.

11. (Original): The composition according to Claim 1, wherein the silicon carbide has a disagglomeration rate α which is greater than $1 \times 10^{-4} \mu\text{m}^{-1}/\text{s}$.

12. (Original): The composition according to Claim 11, wherein the silicon carbide has a disagglomeration rate α which is greater than $5 \times 10^{-4} \mu\text{m}^{-1}/\text{s}$.

13. (Original): The composition according to Claim 12, wherein the silicon carbide has a disagglomeration rate α which is greater than $1 \times 10^{-3} \mu\text{m}^{-1}/\text{s}$.

14. (Original): The composition according to Claim 1, wherein the coupling agent is a polysulfurised alkoxysilane.

15. (Original): The composition according to Claim 1, wherein the diene elastomer is selected from among the group consisting of polybutadienes, synthetic polyisoprenes, natural rubber, butadiene-styrene copolymers, butadiene-isoprene copolymers, butadiene-acrylonitrile copolymers, isoprene-styrene copolymers, butadiene-styrene-isoprene copolymers and mixtures thereof.

16. (Original): The composition according to Claim 15, wherein the diene elastomer is a butadiene-styrene copolymer (SBR) having a styrene content of between 20% and 30% by weight, a content of vinyl bonds of the butadiene fraction of between 15% and 65%, a content of trans-1,4 bonds of between 20% and 75% and a glass transition temperature of between -20°C and -55°C.

17. (Original): The composition according to Claim 16, wherein the SBR is a SBR prepared in solution (SSBR) and used in a mixture with a polybutadiene having more than 90% cis-1,4 bonds.

18. (Currently Amended): A process for obtaining a rubber composition usable for the manufacture of tires, wherein there are incorporated into at least a diene elastomer, at least a reinforcing inorganic filler and a coupling agent providing the bond between the inorganic filler and the elastomer, wherein said inorganic filler comprises a silicon carbide having the following features:

- (a) a BET specific surface of between 20 and 200 m²/g;

- (b) an average particle size by mass, d_w , of between 10 and 350 nm; said silicon carbide constituting more than 50% by volume of total reinforcing filler;
[[and]] wherein the entire mixture is kneaded thermomechanically, in one or more stages, until a maximum temperature of between 110°C and 190°C is reached, and wherein the amount of silicon carbide is greater than 50 phr.

Claim 19 (Canceled)

Claim 20 (Canceled)

21. (Original): The process according to Claim 18, wherein said reinforcing inorganic filler further comprises silica or alumina

22. (Original): The process according to Claim 18, further comprising incorporating carbon black.

23. (Original): The process according to Claim 22, wherein the amount of carbon black is between 2 and 20 phr.

24. (Original): The process according to Claim 18, wherein the BET surface area is of between 20 and 150 m²/g.

25. (Original): The process according to Claim 24, wherein the BET surface area lies within a range from 25 to 140 m²/g.

26. (Original): The process according to Claim 18, wherein the size d_w lies within a range from 20 to 300 nm.

27. (Original): The process according to Claim 26, wherein the size d_w lies within a range from 20 to 250 nm.

28. (Original): The process according to Claim 18, wherein the silicon carbide has a disagglomeration rate α which is greater than $1 \times 10^{-4} \mu\text{m}^{-1}/\text{s}$.

29. (Original): The process according to Claim 28 wherein the silicon carbide has a disagglomeration rate α which is greater than $5 \times 10^{-4} \mu\text{m}^{-1}/\text{s}$.

30. (Original): The process according to Claim 29, wherein the silicon carbide has a disagglomerating rate α which is greater than $1 \times 10^{-3} \mu\text{m}^{-1}/\text{s}$.

31. (Original): The process according to Claim 18, wherein the diene elastomer is selected from among the group consisting of polybutadienes, synthetic polyisoprenes, natural rubber, butadiene-styrene copolymers, butadiene-isoprene copolymers, butadiene-acrylonitrile copolymers, isoprene-styrene copolymers, butadiene-styrene-isoprene copolymers and mixtures thereof.

32. (Original): The process according to Claim 18, wherein the maximum kneading temperature is between 130°C and 180°C.

33. (Currently Amended): A tire comprising a rubber composition comprising a diene elastomer, a reinforcing inorganic filler, a coupling agent providing the bond between the inorganic filler and the elastomer, wherein said inorganic filler comprises a silicon carbide having the following features:

- (a) a BET specific surface area of between 20 and 200 m²/g;
- (b) an average particle size by mass, noted d_w, of between 10 and 350 nm; [[and]]

wherein said silicon carbide constitutes more than 50% by volume of total reinforcing filler and the amount of silicon carbide is greater than 50 phr.

Claim 34 (Canceled)

Claim 35 (Canceled)

36. (Original): The tire according to Claim 33, wherein said reinforcing inorganic filler further comprises silica or alumina.

37. (Original): The tire according to Claim 33, wherein the rubber composition further comprises carbon black.

38. (Original): The tire according to Claim 37, wherein the amount of carbon black is between 2 and 20 phr.

39. (Original): The tire according to Claim 33, wherein the BET surface area is between 20 and 150 m²/g.

40. (Original): The tire according to Claim 39, wherein the BET surface area lies within a range from 25 to 140 m²/g.

41. (Original): The tire according to Claim 33, wherein the size d_w lies within a range from 20 to 300 nm.

42. (Original): The tire according to Claim 41, wherein the size d_w lies within a range from 20 to 250 nm.

43. (Original): The tire according to Claim 33, wherein the silicon carbide has a disagglomeration rate α which is greater than $1 \times 10^{-4} \mu\text{m}^{-1}/\text{s}$.

44. (Original): The tire according to Claim 43, wherein the silicon carbide has a disagglomeration rate α which is greater than $5 \times 10^{-4} \mu\text{m}^{-1}/\text{s}$.

45. (Original): The tire according to Claim 44, wherein the silicon carbide has a disagglomeration rate α which is greater than $1 \times 10^{-3} \mu\text{m}^{-1}/\text{s}$.

46. (Original): The tire according to Claim 33, wherein the coupling agent is a polysulfurised alkoxysilane.

47. (Original): The tire according to Claim 33, wherein the diene elastomer is selected from among the group consisting of polybutadienes, synthetic polyisoprenes, natural rubber, butadiene-styrene copolymers, butadiene-isoprene copolymers, butadiene-

acrylonitrile copolymers, isoprene-styrene copolymers, butadiene-styrene-isoprene copolymers and mixtures thereof.

48. (Currently Amended): A tire tread comprising a rubber composition comprising a diene elastomer, a reinforcing inorganic filler, a coupling agent providing the bond between the inorganic filler and the elastomer, wherein said inorganic filler comprises a silicon carbide having the following features:

- (a) a BET specific surface area of between 20 and 200 m²/g;
- (b) an average particle size by mass, noted d_w, of between 10 and 350 nm; [[and]]

wherein said silicon carbide constitutes more than 50% by volume of total reinforcing filler and the amount of silicon carbide is greater than 50 phr.

Claim 49 (Canceled)

Claim 50 (Canceled)

51. (Original): The tread according to Claim 48, wherein said reinforcing inorganic filler further comprises silica or alumina.

52. (Original): The tread according to Claim 48, wherein the rubber composition further comprises carbon black.

53. (Original): The tread according to Claim 52, wherein the amount of carbon black is between 2 and 20 phr.

54. (Original): The tread according to Claim 48, wherein the BET surface area is between 20 and 150 m²/g.

55. (Original): The tread according to Claim 54, wherein the BET surface area lies within a range from 25 to 150 m²/g.

56. (Original): The tread according to Claim 48, wherein the size d_w lies within a range from 20 to 300 nm.

57. (Original): The tread according to Claim 56, wherein the size d_w lies within a range from 20 to 250 nm.

58. (Original): The tread according to Claim 48, wherein the silicon carbide has a disagglomeration rate α which is greater than $1 \times 10^{-4} \mu\text{m}^{-1}/\text{s}$.

59. (Original): The tread according to Claim 58, wherein the silicon carbide has a disagglomeration rate α which is greater than $5 \times 10^{-4} \mu\text{m}^{-1}/\text{s}$.

60. (Original): The tread according to Claim 59, wherein the silicon carbide has a disagglomeration rate α which is greater than $1 \times 10^{-3} \mu\text{m}^{-1}/\text{s}$.

61. (Original): The tread according to Claim 48, wherein the coupling agent is a polysulfurised alkoxysilane.

62. (Original): The tread according to Claim 48, wherein the diene elastomer is selected from among the group consisting of polybutadienes, synthetic polyisoprenes, natural rubber, butadiene-styrene copolymers, butadiene-isoprene copolymers, butadiene-acrylonitrile copolymers, isoprene-styrene copolymers, butadiene-styrene-isoprene copolymers and mixtures thereof.

63. (Original): The tread according to Claim 62, wherein the diene elastomer is a butadiene-styrene copolymer (SBR) having a styrene content of between 20% and 30% by weight, a content of vinyl bonds of the butadiene fraction of between 15% and 65%, a content of trans-1,4-bonds of between 20% and 75% and a glass transition temperature of between -20°C and -55°C.

64. (Original): The tread according to Claim 63, wherein the SBR is a SBR prepared in solution (SSBR) and used in a mixture with a polybutadiene having more than 90% -cis-1,4 bonds.

65. (Currently Amended): The composition according to claim [[3]] 1, wherein the amount of silicon carbide is greater than 60 phr.

66. (Previously Presented): The composition according to claim 65, wherein the amount of silicon carbide is greater than 70 phr.

67. (Previously Presented): The composition according to claim 8, wherein the BET surface area is between 60 and 120 m²/g.

68. (Previously Presented): The composition according to claim 10, wherein the particle size d_w is between 30 and 100 nm.

69. (Currently Amended): The process according to claim ~~[[20]]~~ 18, wherein the amount of silicon carbide is greater than 60 phr.

70. (Previously Presented): The process according to claim 69, wherein the amount of silicon carbide is greater than 70 phr.

71. (Previously Presented): The process according to claim 25, wherein the BET surface area is of between 60 and 120 m^2/g .

72. (Previously Presented): The process according to claim 27, wherein the particle size d_w is of between 30 and 100 nm.

73. (Currently Amended): The tire according to claim ~~[[35]]~~ 33, wherein the amount of silicon carbide is greater than 60 phr.

74. (Previously Presented): The tire according to claim 73, wherein the amount of silicon carbide is greater than 70 phr.

75. (Previously Presented): The tire according to claim 40, wherein the BET surface area is between 60 and 120 m^2/g .

76. (Previously Presented): The tire according to claim 42, wherein the particle size d_w is between 30 and 100 nm.

77. (Currently Amended): The tread according to claim ~~[[50]]~~ 48, wherein the amount of silicon carbide is greater than 60 phr.

78. (Previously Presented): The tread according to claim 77, wherein the amount of silicon carbide is greater than 70 phr.

79. (Previously Presented): The tread according to claim 55, wherein the BET surface area is between 60 and 120 m^2/g .

80. (Previously Presented): The tread according to claim 57, wherein the particle size d_w is between 30 and 100 nm.